

AMENDMENTS TO THE CLAIMS

(IN FORMAT COMPLIANT WITH THE REVISED 37 CFR 1.121)

1. (CURRENTLY AMENDED) An apparatus comprising:

a circuit configured to (i) monitor a plurality of signals for transitions and (ii) invert said signals only when at least a predetermined number of said signals transition ~~in to~~ a predetermined direction particular logic state; and

5 a plurality of buffers configured to present said signals on a transmission bus.

2. (CURRENTLY AMENDED) The apparatus according to claim 1, wherein said ~~predetermined direction particular logic state~~ is one of (i) a high logic state ~~to low direction~~ and (ii) a low logic state ~~to high direction~~.

3. (ORIGINAL) The apparatus according to claim 1, wherein said predetermined number is greater than one half of a total number of said signals.

4. (CURRENTLY AMENDED) The apparatus according to claim 1, wherein said circuit comprises:

a transition checker circuit directly receiving said signals and configured to present a plurality of transition signals
5 each indicating a transition direction of one of said signals;
a control circuit configured to present a flag signal when at least said predetermined number of said transition signals indicate said transition direction is to said particular logic state ~~have said predetermined direction~~; and
10 an inverter circuit configured to invert said signals in response to said flag signal.

5. (ORIGINAL) The apparatus according to claim 4, wherein said buffers are further configured to present said flag signal on said transmission bus.

6. (CURRENTLY AMENDED) The apparatus according to claim 4, wherein said transition checker circuit comprises:

a plurality of flip-flops directly receiving said signals and configured to present said signals as a plurality of sampled signals;
5 a plurality of inverters configured to present said signals as a plurality of inverted signals; and
a plurality of logic gates configured to present said transition signals in response to said sampled signals and said 10 inverted signals.

7. (CURRENTLY AMENDED) The apparatus according to claim 4, wherein said circuit further comprises a plurality of first flip-flops configured to store said signals as presented by said inverter circuit.

8. (CURRENTLY AMENDED) The apparatus according to claim 7, wherein said circuit further comprises a clock configured to present a clock signal to said first flip-flops.

9. (CURRENTLY AMENDED) The apparatus according to claim 8, wherein said buffers are further configured to present said flag signal on said transmission bus and said transition checker circuit comprises:

5 a plurality of second flip-flops configured to present said signals as a plurality of sampled signals;

a plurality of inverters configured to present said signals as a plurality of inverted signals; and

10 a plurality of logical gates configured to present said transition signals in response to said sampled signals and said inverted signals.

10. (CURRENTLY AMENDED) A method of reducing noise induced by transitions of a plurality of signals, the method comprising the steps of:

(A) monitoring said signals for said transitions;

5 (B) inverting said signals only in response to at least a predetermined number of said signals transitioning ~~in to~~ a ~~predetermined direction~~ particular logic state; and

(C) presenting said signals on a transmission bus.

11. (CURRENTLY AMENDED) The method according to claim 10, wherein said ~~predetermined direction~~ particular logic state is one of (i) a high logic state to low direction and (ii) a low logic state to high direction.

12. (ORIGINAL) The method according to claim 10, wherein said predetermined number is greater than one half of a total number of said signals.

13. (CURRENTLY AMENDED) The method according to claim 10, wherein step (A) comprises the sub-steps of:

generating a plurality of transition signals each indicating a transition direction of one of said signals; and

5 generating a flag signal when at least said predetermined number of said transition signals indicate said transition

direction is to said particular logic state have said predetermined direction.

14. (ORIGINAL) The method according to claim 13, further comprising the step of presenting said flag signal on said transmission bus.

15. (ORIGINAL) The method according to claim 13, wherein presenting said plurality of transition signals comprises the sub-steps of:

sampling said signals to present a plurality of sampled signals;

inverting said signals to present a plurality of inverted signals; and

logically combining said sampled signals and said inverted signals to present said transition signals.

16. (CURRENTLY AMENDED) The method according to claim 13, further comprising the step of storing said signals prior to presenting said signal on said transmission bus.

17. (ORIGINAL) The method according to claim 16, further comprising the step of generating a clock signal to control said storing.

18. (PREVIOUSLY PRESENTED) An integrated circuit comprising:

means for monitoring a plurality of signals for transitions;

5 means for inverting said signals only in response to at least a predetermined number of said signals transitioning in a predetermined direction; and

means for presenting said signals on a transmission bus.

19. (PREVIOUSLY PRESENTED) The integrated circuit according to claim 18, wherein said predetermined direction is one of (i) a high to low direction and (ii) a low to high direction.

20. (CURRENTLY AMENDED) The integrated circuit according to claim 18, wherein said means for monitoring comprises:

means for presenting a plurality of transition signals on a plurality of independent lines, each of said transition signals indicating a transition direction of one of said signals.